FIG. 1(a)

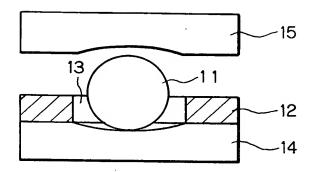


FIG. 1(b)
15
12
10

FIG. 2

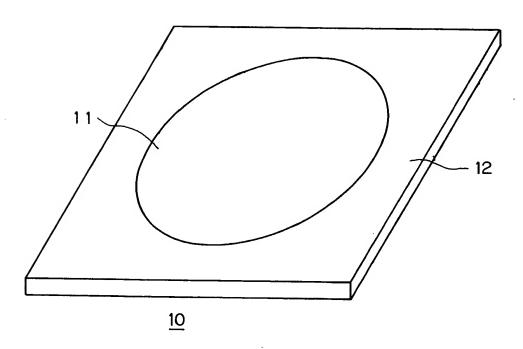


FIG. 3(a)

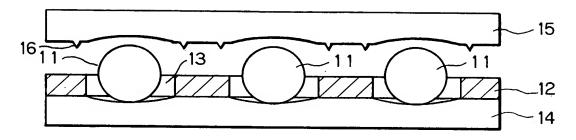


FIG. 3(b)

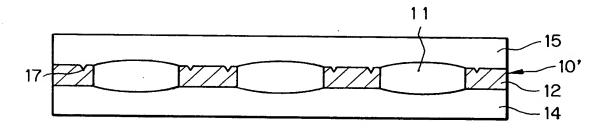
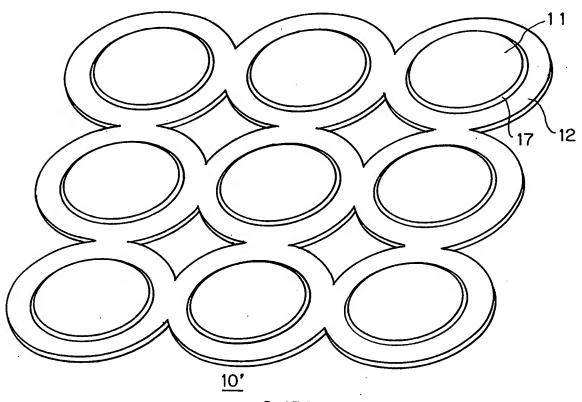


FIG. 4



2/58

FIG. 5(a)

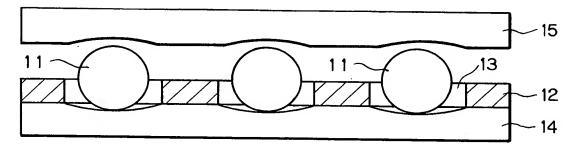


FIG. 5(b)

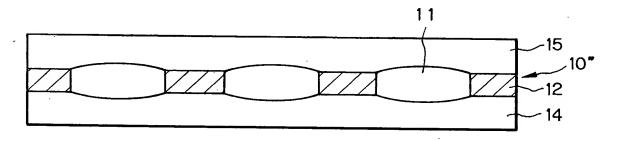


FIG. 6

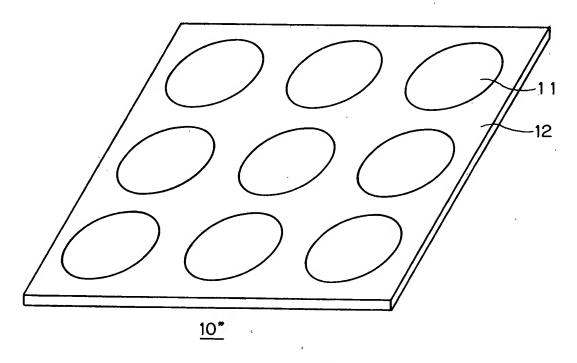


FIG. 7(a)

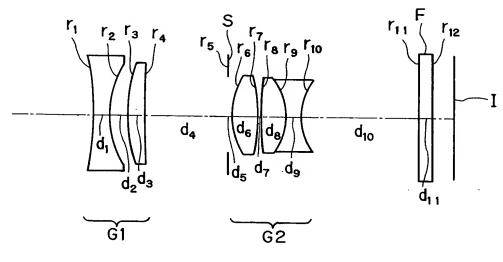


FIG. 7(b)

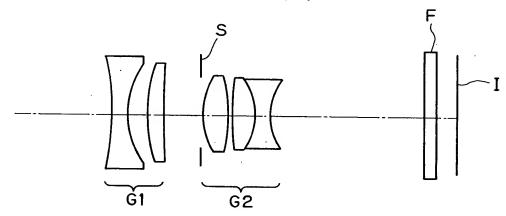


FIG. 7(c)

S

G1 G2

FIG. 8(a)

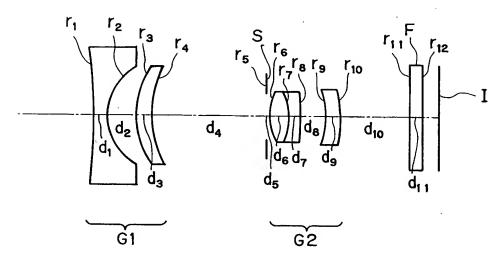
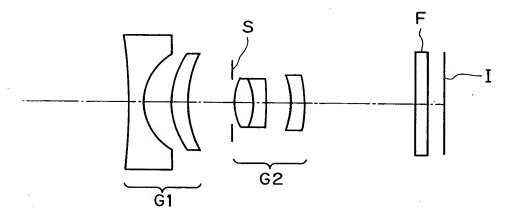
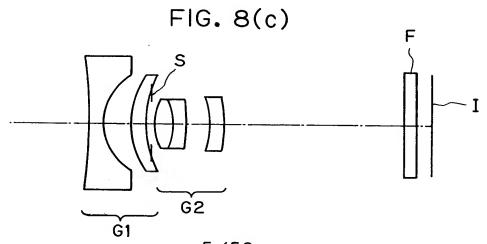


FIG. 8(b)





5/58

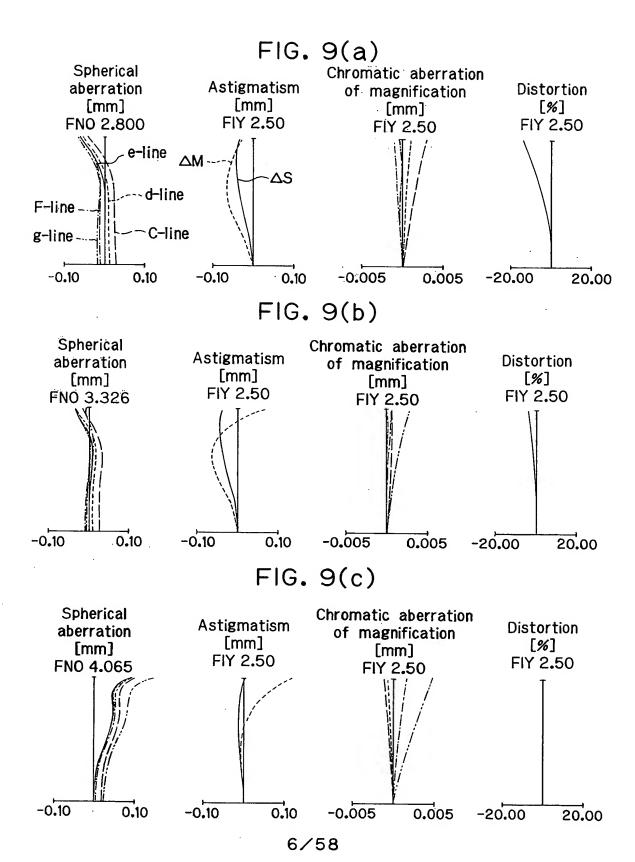


FIG. 10(a) **Spherical** Chromatic aberration **Astigmatism** aberration Distortion of magnification [mm] [mm] [%] [mm] FIY 2.50 FNO 3.500 FIY 2.50 FIY 2.50 -0.10 -0.10 0.10 0.10 -0.005 0.005 -20.00 20.00 FIG. 10(b) **Spherical** Chromatic aberration Astigmatism aberration of magnification Distortion [mm] [mm] [mm] [%] **FIY 2.50** FNO 4.526 FIY 2.50 FIY 2.50 -0.10 -0.10 0.10 0.10 -0.005 0.005 -20.00 20.00 FIG. 10(c) Spherical Chromatic aberration aberration Astigmatism<sup>®</sup> of magnification Distortion [mm] [mm] [mm] [%] FNO 6.298 FIY 2.50 FIY 2.50 FIY 2.50 -0.10 0.10 0.10 -0.005 -0.10 0.005 -20.00 20.00

7/58

FIG. 11

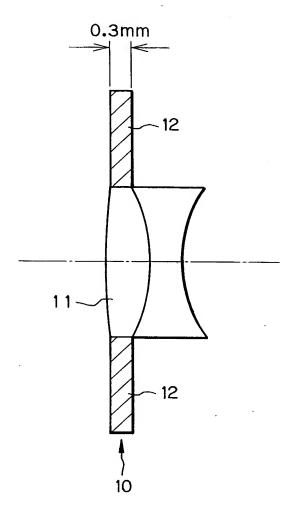


FIG. 12

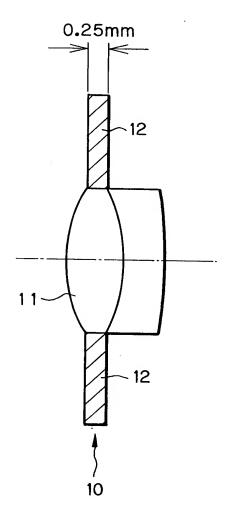


FIG. 13

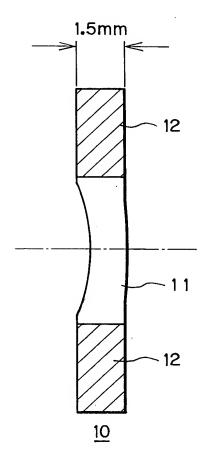


FIG. 14(a)

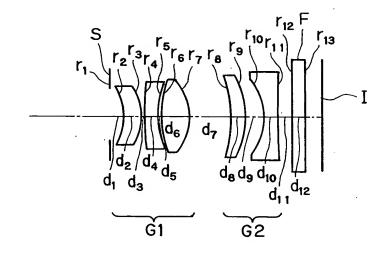


FIG. 14(b)

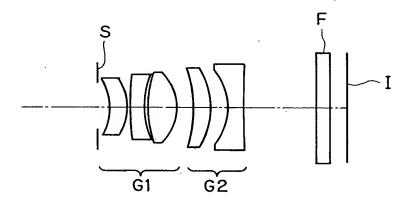
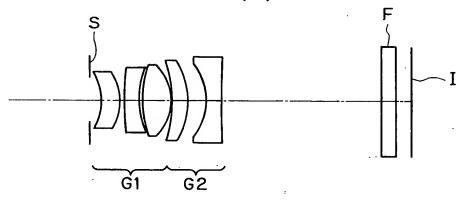


FIG. 14(c)



11/58

FIG. 15(a)

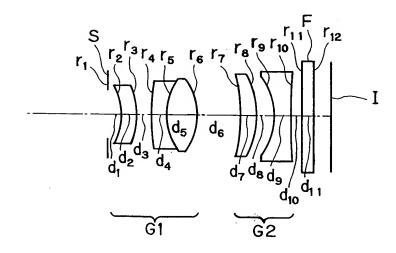


FIG. 15(b)

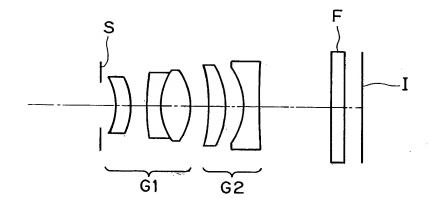
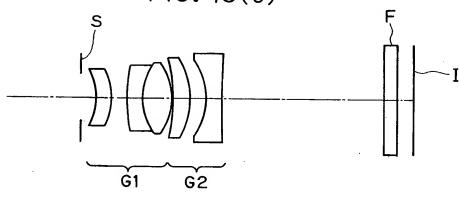


FIG. 15(c)



12/58

FIG. 16(a)

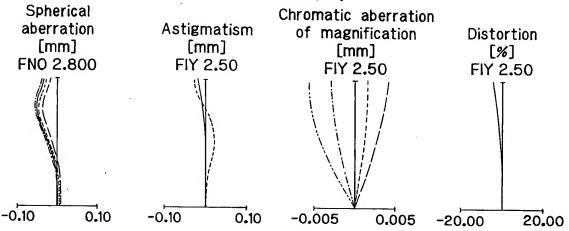


FIG. 16(b)

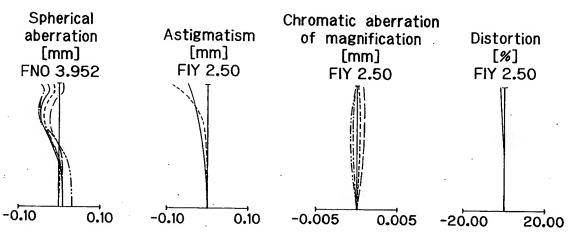
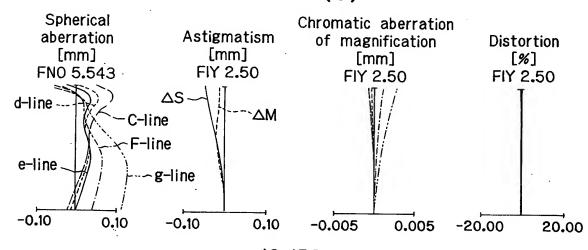


FIG. 16(c)



13/58

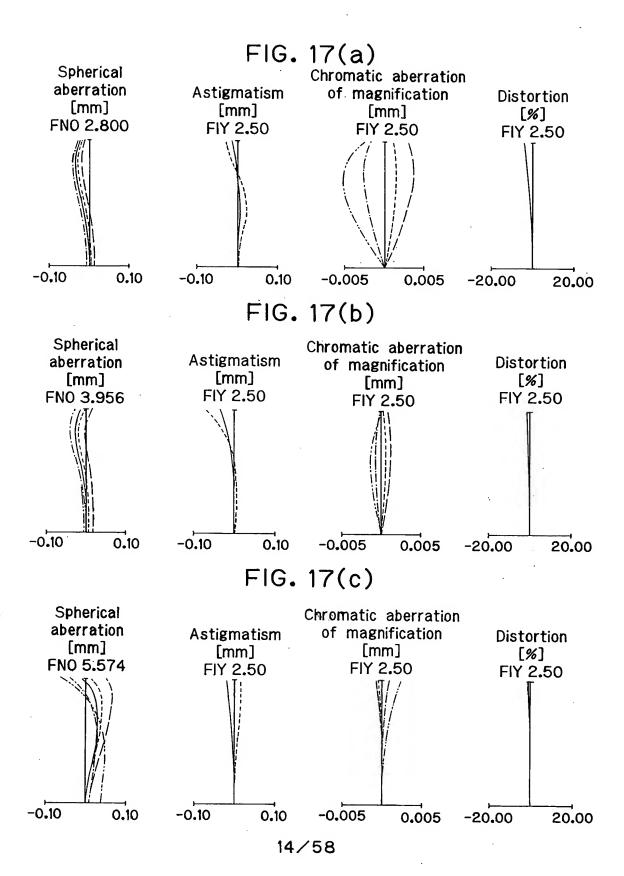


FIG. 18

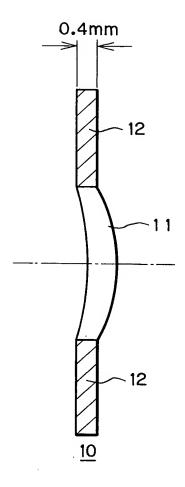
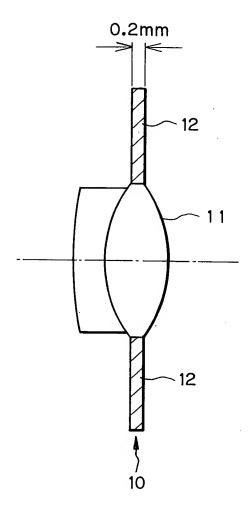


FIG. 19



## FIG. 20(a)

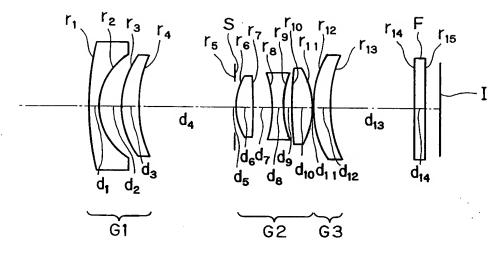


FIG. 20(b)

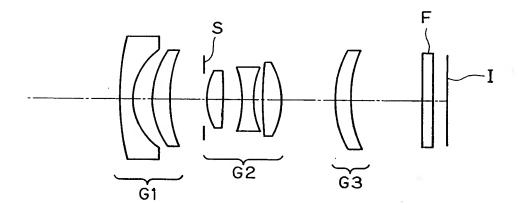
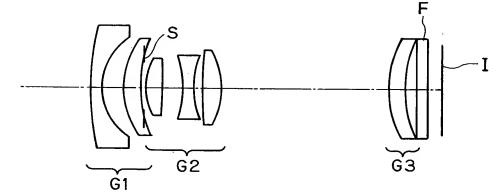


FIG. 20(c)



17/58

FIG. 21(a)

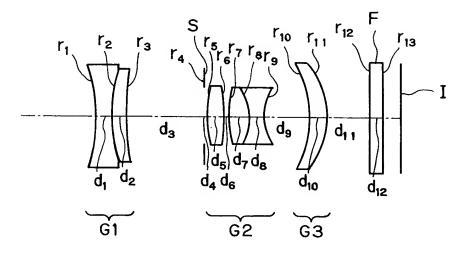


FIG. 21(b)

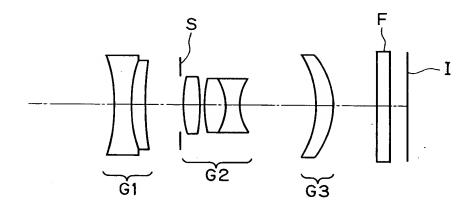
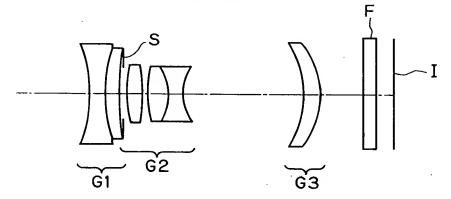


FIG. 21(c)



18/58

FIG. 22(a)

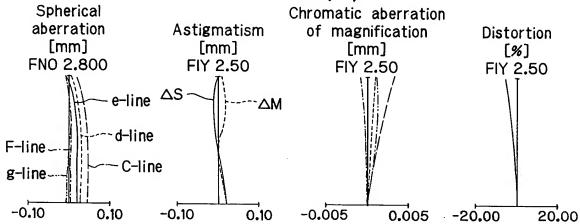


FIG. 22(b)

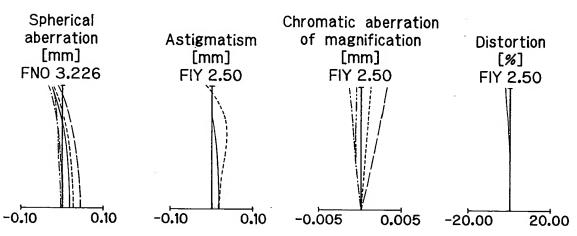
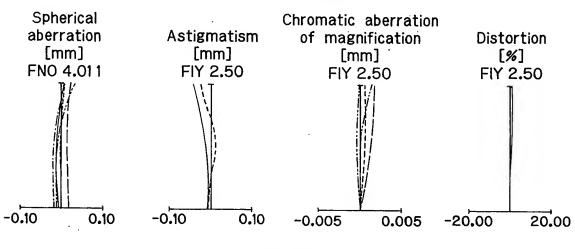


FIG. 22(c)



19/58

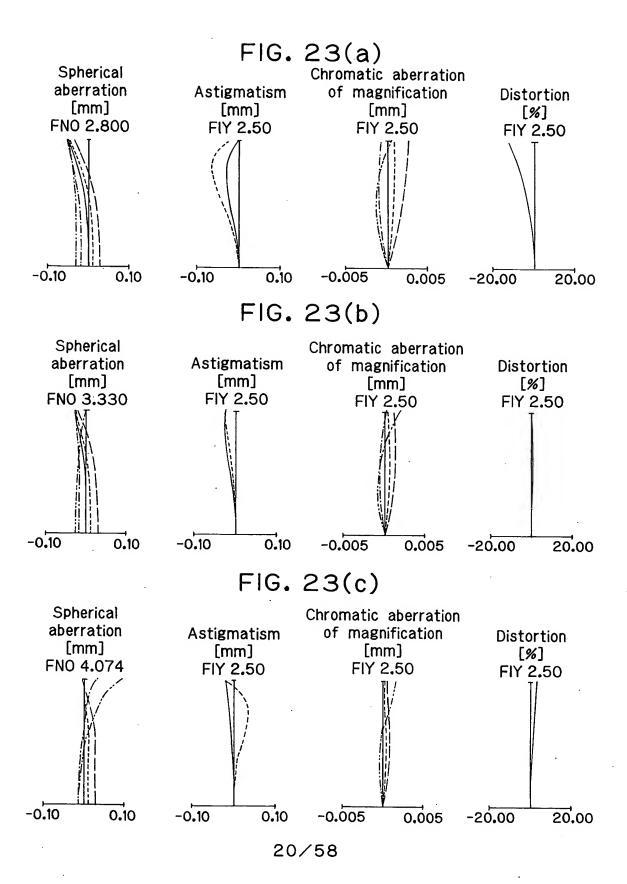


FIG. 24

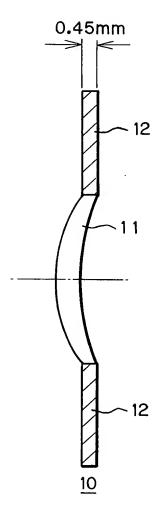


FIG. 25

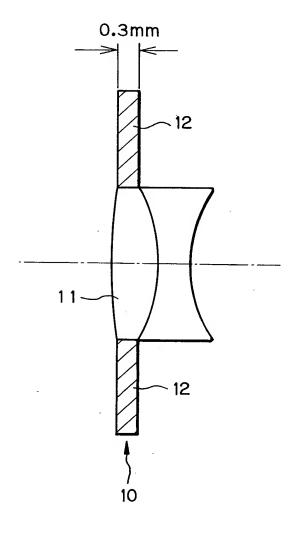
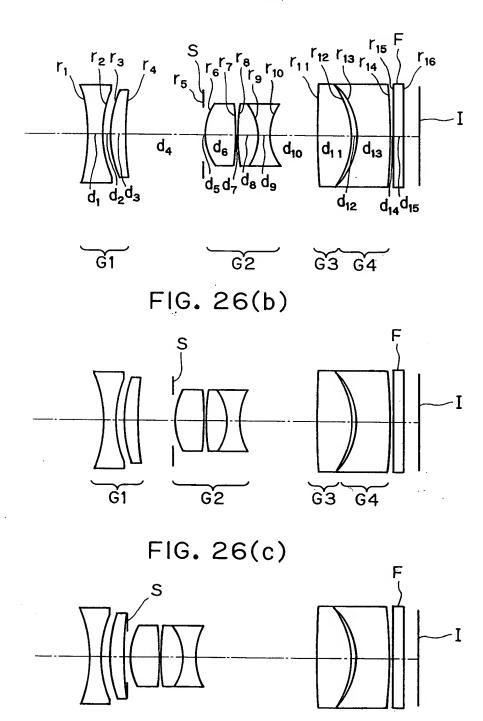


FIG. 26(a)



23/58

G3 G4

G2

Ğ1

FIG. 27(a)

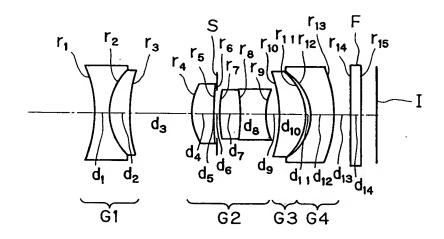


FIG. 27(b)

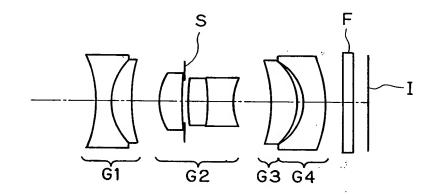
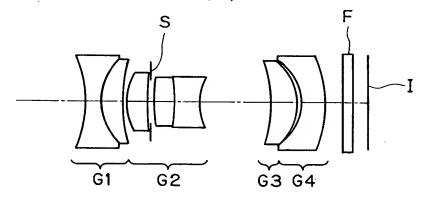


FIG. 27(c)



24/58

FIG. 28(a)

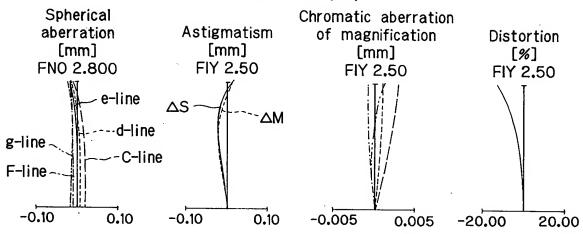


FIG. 28(b)

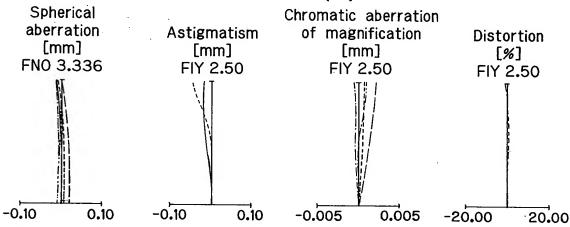
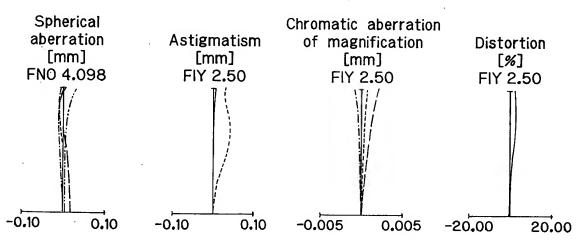


FIG. 28(c)



25/58

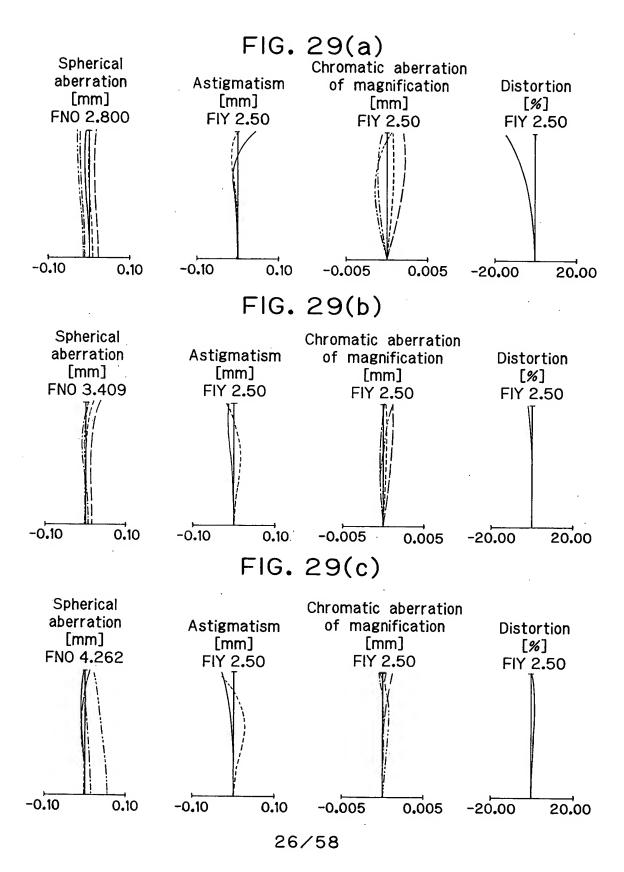


FIG. 30

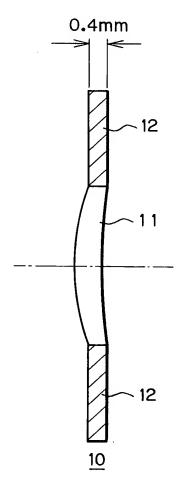


FIG. 31

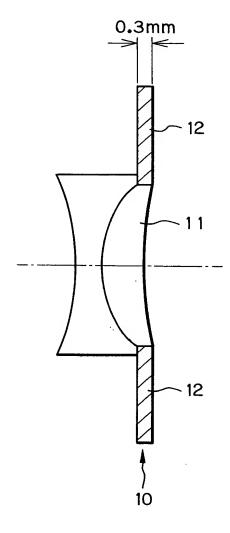


FIG. 32(a)

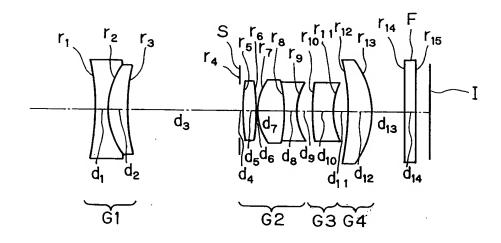


FIG. 32(b)

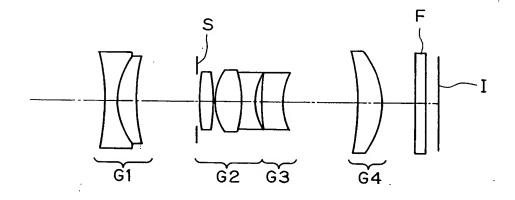
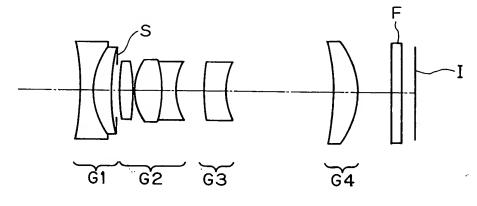


FIG. 32(c)



29/58

FIG. 33(a)

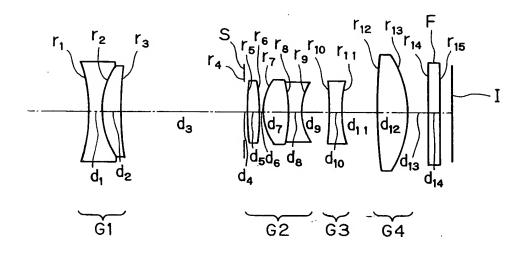


FIG. 33(b)

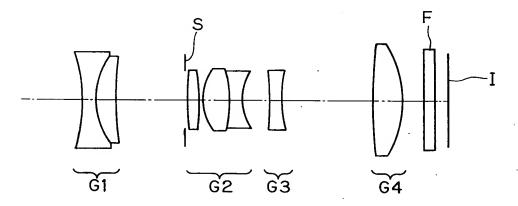
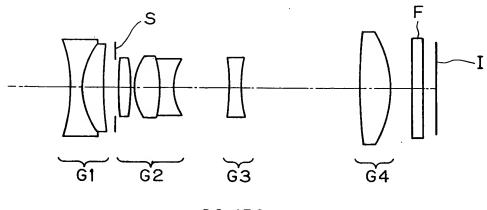
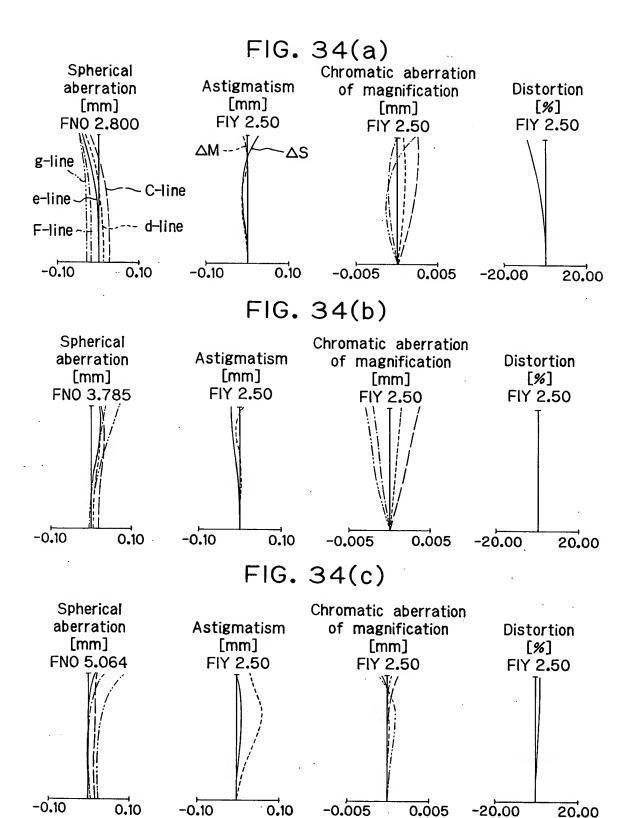


FIG. 33(c)



30/58



31/58

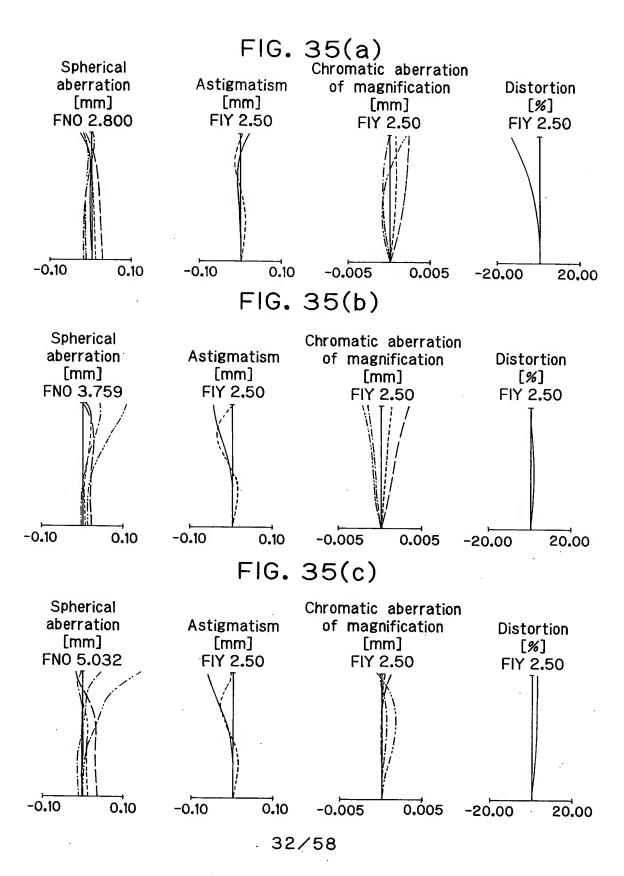


FIG. 36

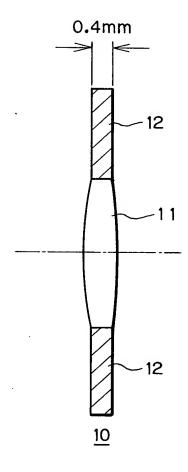


FIG. 37

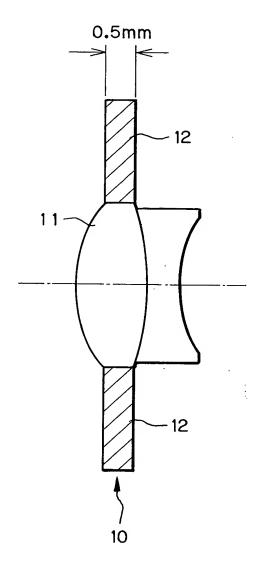


FIG. 38(a)

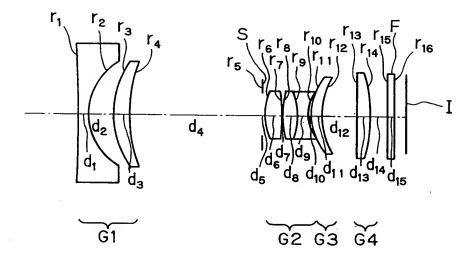


FIG. 38(b)

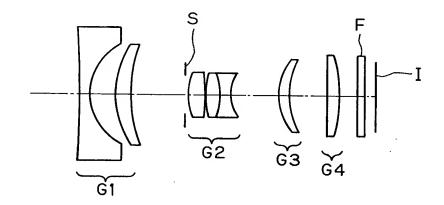
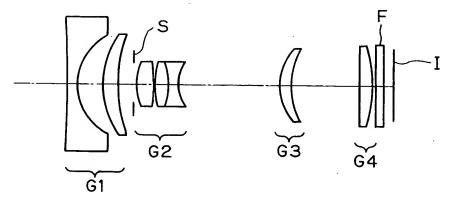


FIG. 38(c)



35/58

FIG. 39(a)

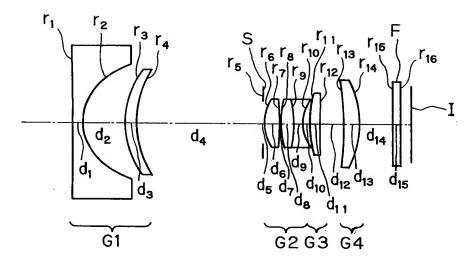


FIG. 39(b)

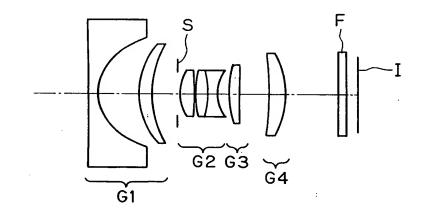
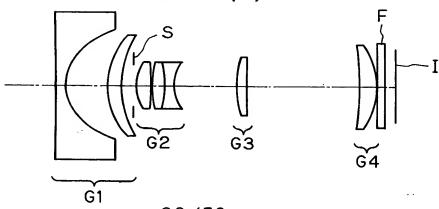


FIG. 39(c)



36/58

FIG. 40(a)

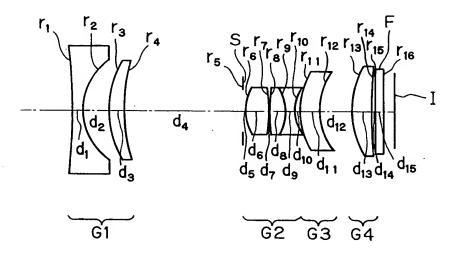


FIG. 40(b)

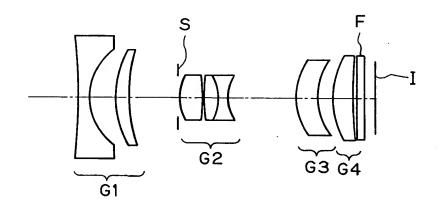
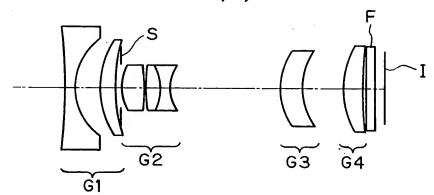


FIG. 40(c)



37/58

FIG. 41(a)

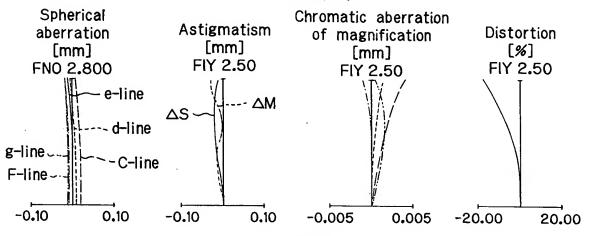


FIG. 41(b)

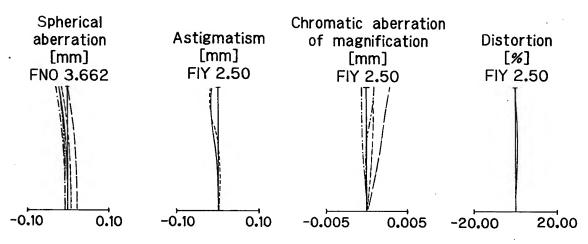
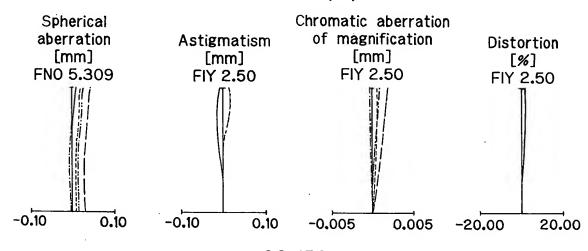
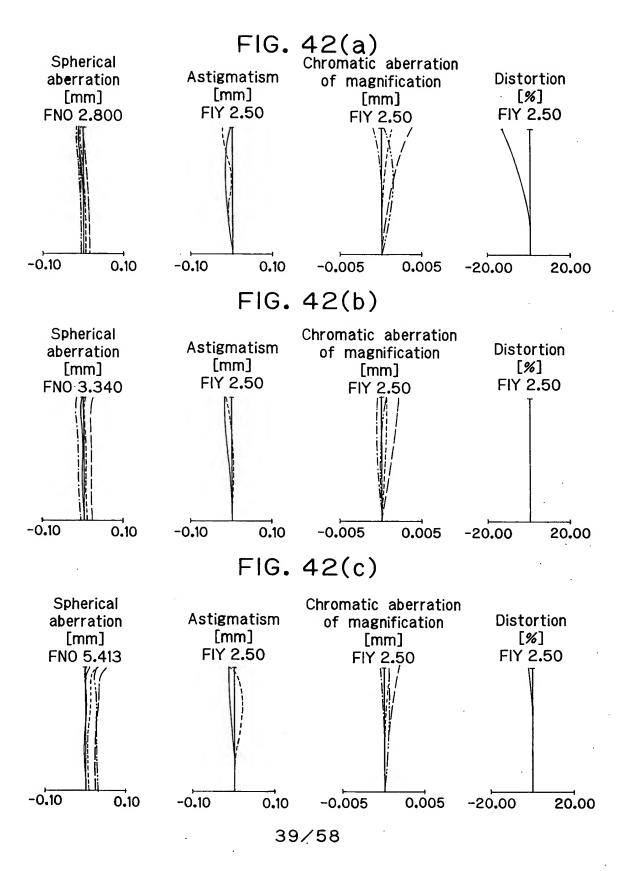


FIG. 41(c)



38/58



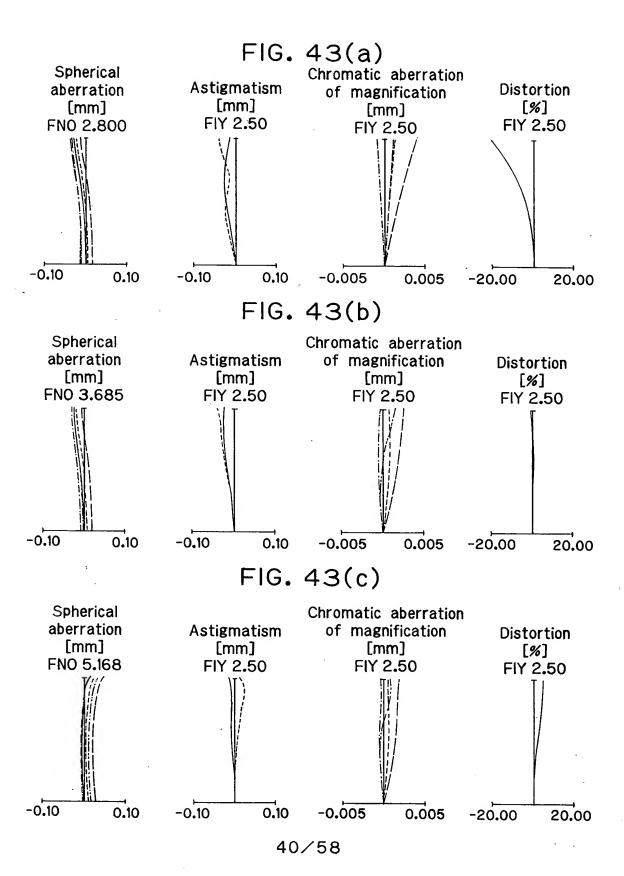


FIG. 44

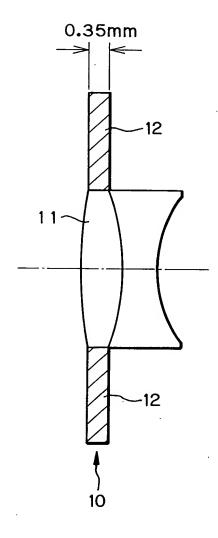


FIG. 45

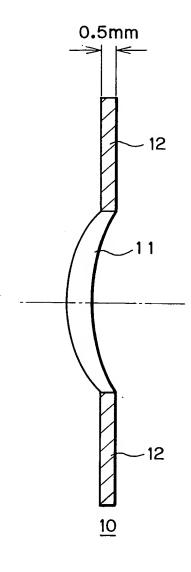


FIG. 46

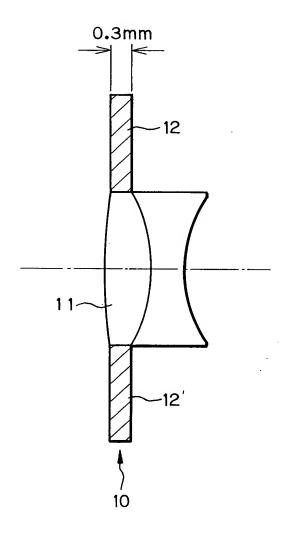


FIG. 47(a)

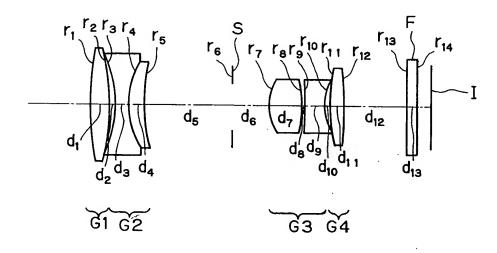


FIG. 47(b)

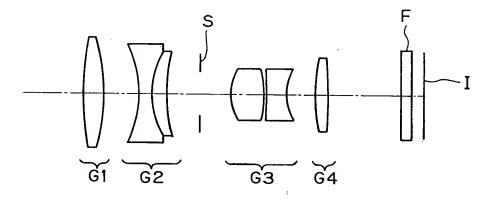
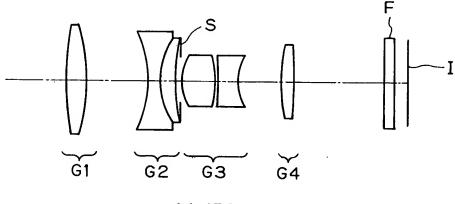


FIG. 47(c)



44/58

FIG. 48(a)

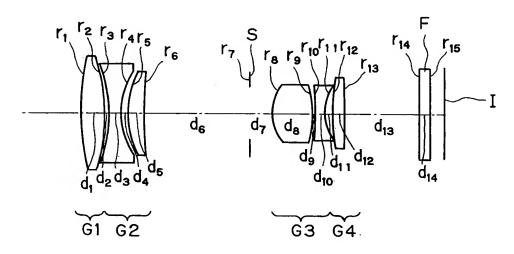


FIG. 48(b)

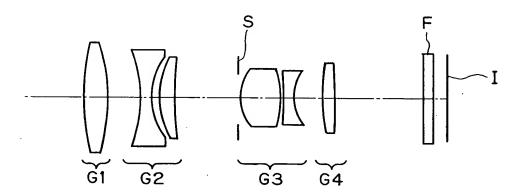


FIG. 49(a)

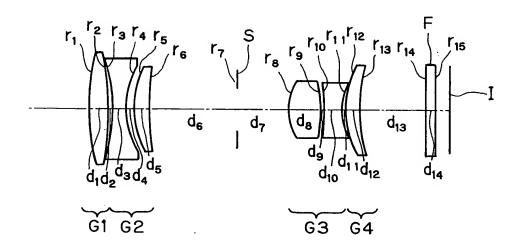


FIG. 49(b)

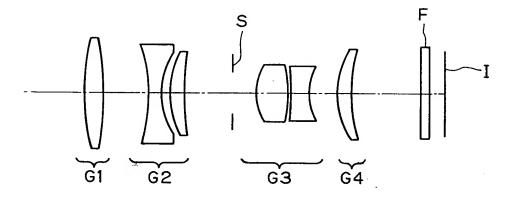
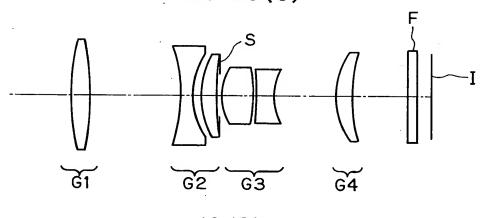


FIG. 49(c)



46/58

FIG. 50(a)Spherical Chromatic aberration **Astigmatism** Distortion aberration of magnification [mm] [mm] [%] [mm] FIY 2.50 FNO 2.800 FIY 2.50 FIY 2.50 --**△**M - d-line F-line ~ C-line g-line -0.10 0.10 -0.10 0.10 -0.005 0.005 -20.00 20.00 FIG. 50(b) Spherical Chromatic aberration aberration of magnification **Astigmatism** Distortion [mm] [mm] [mm] [%] FNO 3.315 FIY 2.50 FIY 2.50 FIY 2.50 -0.10 -0.10 0.10 0.005 0.10 -0.005 -20.00 20.00 FIG. 50(c) **Spherical** Chromatic aberration aberration of magnification **Astigmatism** Distortion [mm] [mm] [mm] [%] FNO 4.294 FIY 2.50 **FIY 2.50 FIY 2.50** -0.10 0.10 -0.10 0.10 -0.005 0.005 -20.00 20.00

47/58

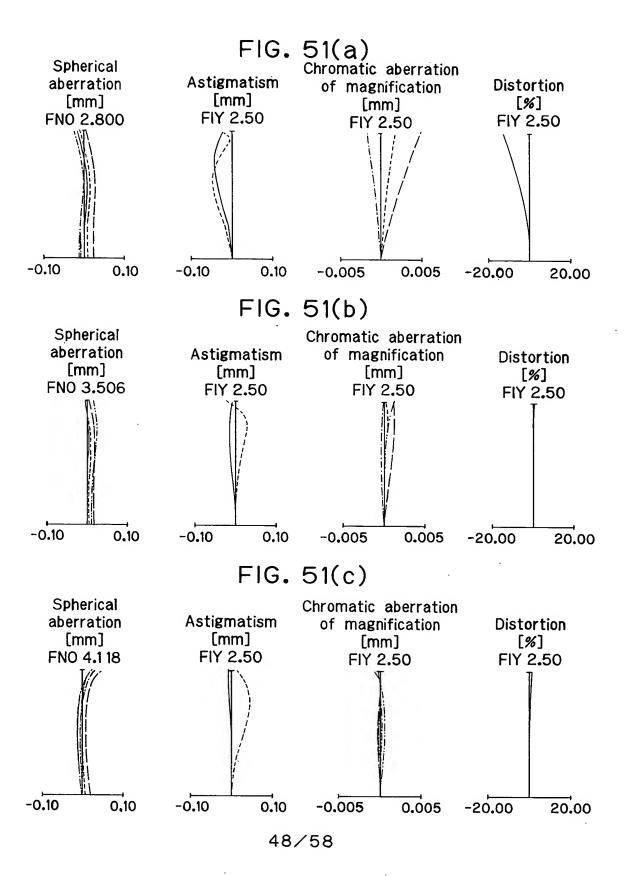


FIG. 52(a) Spherical Chromatic aberration **Astigmatism** Distortion aberration of magnification [mm] [mm] [%] [mm] FIY 2.50 **FIY 2.50** FNO 2.800 FIY 2.50 -0.10 0,10 -0.10 0.10 -0.005 0.005 -20.00 20,00 FIG. 52(b) **Spherical** Chromatic aberration aberration of magnification **Astigmatism** Distortion [mm] [mm] [mm] [%] FNO 3.417 FIY 2.50 FIY 2.50 FIY 2.50 -0.10 0.10 -0.10 0.10 -0.005 0.005 -20.00 20.00 FIG. 52(c) Spherical Chromatic aberration **Astigmatism** aberration Distortion of magnification [mm] [mm] [%] [mm] FNO 3.909 FIY 2.50 FIY 2.50 FIY 2.50 -0.10 0.10 -0.10 0.10 -0.005 0.005 -20.00 20.00 49/58

FIG. 53

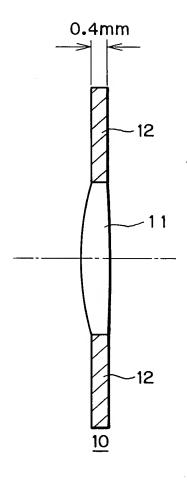


FIG. 54

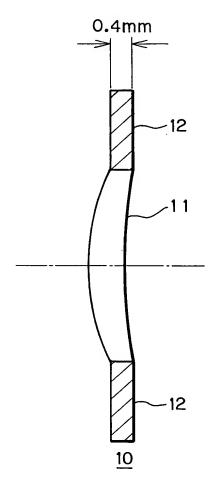


FIG. 55

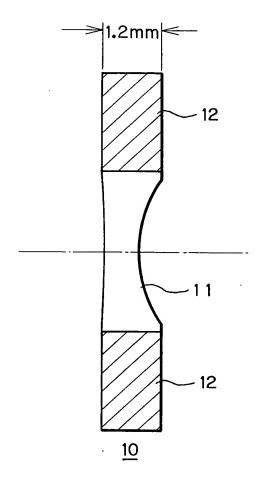


FIG. 56

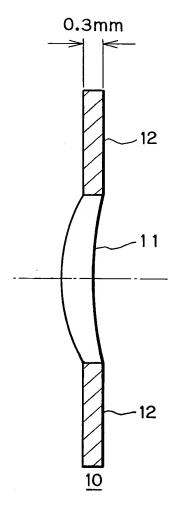


FIG. 57

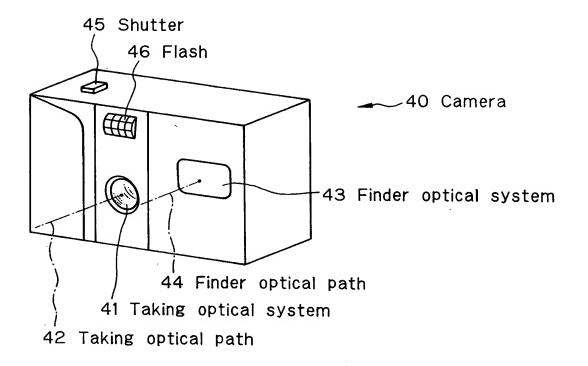
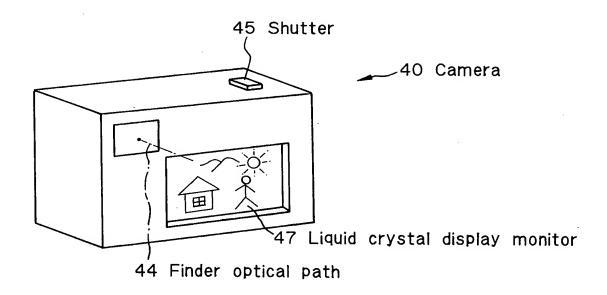


FIG. 58



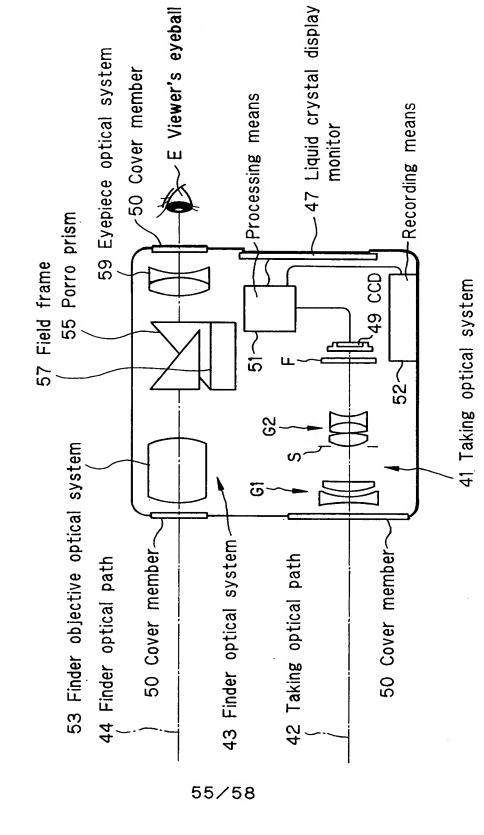


FIG. 59

FIG. 60

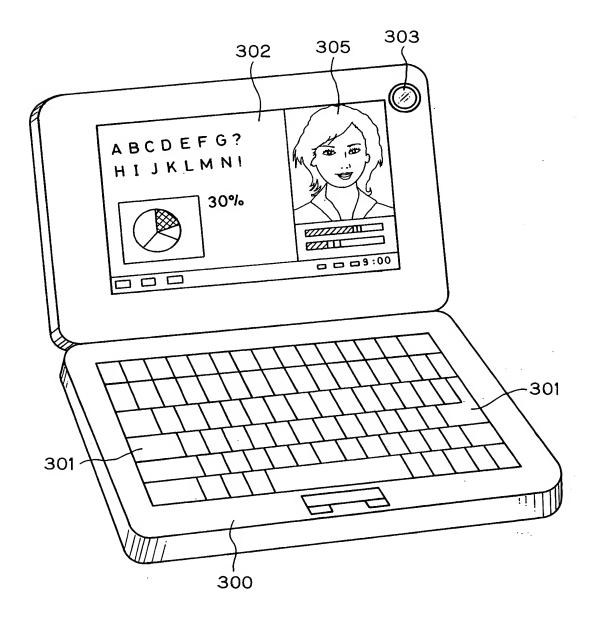


FIG. 61

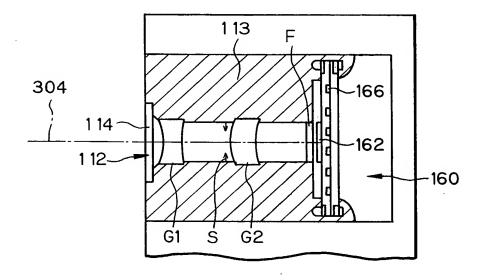


FIG. 62

